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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,941	09/29/2003	Mark Bernard Hettish	2003P08065US	1646

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Siemens Corporation
Attn: Elsa Keller, Legal Administrator
Intellectual Property Department
170 Wood Avenue South
Iselin, NJ 08830

EXAMINER

FEARER, MARK D.

ART UNIT	PAPER NUMBER
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2143

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06/19/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/673,941

Applicant(s)

HETTISH ET AL.

Examiner

Mark D. Fearer

Art Unit

2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☒ Claim(s) 19-22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/29/03, 2/13/04, 3/24/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

The information disclosure statements submitted on 29 September 2003, 13 February 2004 and 24 March 2005 have been considered by the Examiner and made of record in the application file.

Claim Objections

Claims 19-22 are objected to. They should depend on independent claim 18. They currently depend on dependent claim 17. For purposes of examination, claims 19-22 are treated as being dependent on claim 18. Corrective action required.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 12-13, 15-16 and 23-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Farrar et al. (US 6122671 A).

Consider claims 1, 23 and 24. Farrar et al. clearly shows and discloses receiving data from an application, said data being indicative of a message ("The MCS provides services on the Mobile Communicator (AMC) application software so that it can communicate with a satellite modem and exchange data across the satellite network. These services include receiving messages from the application software and

packaging them for delivery to the network, receiving data from the network and translating it into application messages', ...) column 4 lines 36-44), a destination address, and an outgoing message type; converting said message to an outgoing message in a format compatible with said outgoing message type ("Proforma messages from the CAD application 28, described below, are converted and compressed by the CPG application software 26b from text data into a message carrying binary data. The message carrying binary data is then sent to the CPG middleware 26a software which converts the message to a byte stream for transmission to the LES 24 via the X.25 network 20.") column 6 lines 2-8); and sending said outgoing message to said destination address ("In order to send the message packet, the communications software constructs and issues the appropriate LES commands, the provided Destination Address information, and the parameters in the packet header.") column 15 lines 40-44).

Consider claim 12, and as applied to claim 1 above. Farrar et al. clearly shows and discloses a method comprising: sending a response message to said application, said response message being indicative of a delivery of said outgoing message to said destination address ("When the communications software sends a message over the network requesting "Service" level acknowledgment, the LES provides a Positive Delivery Notification (PDN) to the DCE when it successfully delivers the message to the destination communications device.") column 11 lines 5-8).

Consider claim 13, and as applied to claim 1 above. Farrar et al. clearly shows and discloses a method comprising: sending a response message to said application,

said response message being indicative of an error in delivery of said outgoing message to said destination address ("Likewise, if the LES is unable to deliver the message, a Negative Delivery Notification (NDN) is provided to the DCE.") column 11 lines 8-10).

Consider claim 15, and as applied to claim 1 above. Farrar et al. clearly shows and discloses a method comprising: determining that said outgoing message was not delivered to said destination address ("If an error occurs in processing the message, the AIA will pass an error code back to the CAD Application in response to the initial send request.") column 25 lines 16-18).

Consider claim 16, and as applied to claim 1 above. Farrar et al. clearly shows and discloses a method wherein message flow of data is in accordance with a pre-established protocol ("Customer Premise Gateway Message Flow Processes. FIGS. 12-16 illustrate the detailed message flows through the CPG. For each message flow, a diagram illustrates the components involved and direction of data flow. There is a detailed description of each message flow broken down for each component in the CPG architecture. The message flows make reference to "message types" within the MMS network. Messages at both the middleware level and protocol level can be described by a type. The relationship, if one exists, between each middleware message type and the corresponding protocol message type is provided in Table 18. ") column 24 lines 46-57).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 2-11 and 17-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farrar et al. (US 6122671 A) in view of Baum et al. (US 6993026 B1).

Regarding claim 2, and as applied to claim 1 above, Farrar et al. discloses an interface to a satellite messaging system comprising enhanced satellite communications protocol. This reads on the claimed "... establishing a protocol for receiving data ..."

((“The satellite communication switching office 14 includes a satellite antenna 22, and a land earth station (LES) 24 that interfaces between the satellite antenna 22 and the public X.25 network 20. Data packets carrying satellite messages received from the dispatcher 12 via the X.25 network 20 are reassembled by the LES 24, and transmitted to the satellite network 16, preferably using an enhanced satellite communications protocol that provides packet communications between the LES 24 and the AMC 32 without the necessity of additional earth stations to transmit signaling and control messages to the satellite network 16.”) column 5 lines 9-18). However, Farrar et al. fails to teach a method indicative of a message to be sent to a destination address. Baum et al. discloses an end-to-end transport comprising the TCP protocol of which the destination address is inherently a part of the packet. This reads on the claimed "... establishing a protocol for receiving data indicative of a message to be sent to a destination address." ((“The transport layer 224 is an end-to-end protocol. For example, the transmission control protocol (or "TCP") is a reliable connection-oriented protocol that allows a byte stream originating on one machine to be delivered, without error, on any other machine on the Internet. More specifically, the TCP protocol fragments an incoming data stream into discrete messages, each of which is passed to the internet layer 223. At the destination, the TCP protocol reassembles the received messages into an output stream.”) column 3 lines 44-52).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate an end-to-end transport comprising the TCP protocol as taught by Baum et al. with establishing a communications protocol as taught by Farrar et al. for the purpose of transporting datagrams.

Regarding claim 3, and as applied to claim 2 above, Farrar et al. discloses establishing a communications transport protocol. However, Farrar et al. fails to teach a method wherein said protocol includes parameters for outgoing message type and destination address. Baum et al. discloses a protocol that defines the data portion of a datagram and includes a destination address field. This reads on the claimed "... said protocol includes parameters for outgoing message type and destination address." ("The 8-bit protocol field 618 defines the higher-level protocol to which the data portion of the datagram 420 belongs. The 16-bit header checksum field 620 permits the integrity of the IP header 412 to be checked. The 32-bit source address field 322 contains the IP address of the sender of the IP datagram 420 and the 32-bit destination address field contains the IP address of the host to which the IP datagram 120 is being sent.") column 4 lines 35-42).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate a protocol that defines the data portion of a datagram and includes a destination address field as taught by Baum et al. with establishing a communications protocol as taught by Farrar et al. for the purpose of defining state transitions.

Regarding claims 4 and 19, and as applied to claims 2 and 18 above, Farrar et al. discloses establishing a communications transport protocol. However, Farrar et al. fails to teach a method wherein said protocol includes parameters for incoming message type and sender address. Baum et al. discloses an address resolution technique. This reads on the claimed "... said protocol includes parameters for incoming message type and sender address." ("If it can be assumed that IP addresses are globally unique, the layer 2 (e.g., MAC) address of the customer device connected with the port can be associated with, and therefore determined from, the IP address of the attached device. Otherwise (or in addition), the layer 2 (e.g., MAC) address of the customer device connected with the port can be determined using some type of address resolution technique (e.g., resolving the address with a protocol, such as ARP for example, typically by broadcasting a request for an address), and/or snooping (e.g., examining the layer 2 source address of an inbound (ingress) packet).") column 8 lines 19-29).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate an address resolution technique as taught by Baum et al. with establishing a communications transport protocol as taught by Farrar et al. for the purpose of mapping network addresses with hardware addresses.

Regarding claims 5 and 20, and as applied to claims 2 and 18 above, Farrar et al. discloses establishing a communications transport protocol. However, Farrar et al. fails to teach a method wherein said protocol includes a parameter for a service

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provider to be used to send said outgoing message. Baum et al. discloses quality of service mechanisms that can be applied to internet service providers. This reads on the claimed "... said protocol includes a parameter for a service provider to be used to send said outgoing message." ("Second, IP quality of service (or "QoS") is emerging. These QoS mechanisms can be applied to the specific applications and services (e.g., audio-visual multicast, conferencing, high speed access such as via DSL, IP derived lines, IP telephony, IP fax, IP Centrex, Internet service provider (or "ISP") services such as e-mail, Internet access, authorization, authentication and accounting, and billing, and unified messaging) of individual customers.") column 6 lines 19-26).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate quality of service mechanisms as taught by Baum et al. with establishing a communications transport protocol as taught by Farrar et al. for the purpose of efficient distributed routing.

Regarding claims 6, 10 and 21, and as applied to claims 2, 1 and 18 above, Farrar et al. discloses establishing a communications transport protocol. However, Farrar et al. fails to teach a method wherein said protocol includes a parameter for a maximum size of said outgoing message. Baum et al. discloses a method wherein maximum packet size is defined in a communications network ("However, since these networks operated in very different communications environments, certain parameters, such as maximum packet size for example, were different in each case. Thus, methods and protocols were developed for "internetworking" these different packet switched networks.") column 3 lines 10-14).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate a method wherein a protocol includes a parameter for a maximum size of said outgoing message as taught by Baum et al. with establishing a communications transport protocol as taught by Farrar et al. for the purpose of internetworking.

Regarding claim 7, and as applied to claim 1 above, Farrar et al. discloses a method comprising receiving data from an application. However, Farrar et al. fails to teach a method wherein said data is indicative of an address associated with a sender of said message. Baum et al. discloses a communications method wherein the source address field contains the IP address of the sender of a datagram. This reads on the claimed "... said data is indicative of an address associated with a sender of said message." ("The 32-bit source address field 322 contains the IP address of the sender of the IP datagram 420 and the 32-bit destination address field contains the IP address of the host to which the IP datagram 120 is being sent.") column 4 lines 38-42).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate a communications method wherein the source address field contains the IP address of the sender of a datagram as taught by Baum et al. with method comprising receiving data from an application as taught by Farrar et al. for the purpose of address resolution.

Regarding claims 8 and 9, and as applied to claims 1 and 8 above, Farrar et al. discloses a method comprising receiving data from an application. However, Farrar et

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al. fails to teach a method wherein said data is indicative of a service provider to use in said sending said outgoing message to said destination address. Baum et al. discloses treating an ISP as a customer if said ISP has granted requestor a DHCP or private address ("If, on the other hand, a customer is assigned a dynamic IP address (by its Internet service provider (or "ISP")) and that customer is connected with the port through its ISP, for example), then the IP address of column 3050 may have the layer 2 (e.g., MAC) address of a customer currently associated with that IP address (of the ISP's router for example).") column 20 lines 6-11).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate treating on ISP as a customer as taught by Baum et al. with method comprising receiving data from an application as taught by Farrar et al. for the purpose of network translation.

Regarding claim 11, and as applied to claim 10 above, Farrar et al. discloses a method comprising converting a message to an outgoing message in a format compatible with an outgoing message type. However, Farrar et al. fails to teach converting said message into said outgoing message such that said outgoing message does not exceed said maximum size. Baum et al. discloses a method wherein maximum packet size is defined in a communications network ("However, since these networks operated in very different communications environments, certain parameters, such as maximum packet size for example, were different in each case. Thus, methods and protocols were developed for "internetworking" these different packet switched networks.") column 3 lines 10-14).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate a method wherein maximum packet size is defined in a communications network as taught by Baum et al. with a method comprising converting a message to an outgoing message in a format compatible with an outgoing message type as taught by Farrar et al. for the purpose of internetworking.

Regarding claim 17, and as applied to claim 1 above, Farrar et al. discloses a method comprising receiving data from an application. However, Farrar et al. fails to teach a method comprising: establishing a protocol indicative of how to send a message to a sender of said data. Baum et al. discloses communication between a sender and a receiver using the TCP/IP protocol stack ("FIG. 7, which includes FIGS. 7A through 7C, illustrates the communication of data from a sender, to a receiver, using the TCP/IP protocol stack. Referring first to FIG. 7A, an application protocol 702 prepares a block of data (e.g., an e-mail message (SMTP), a file (FTP), user input (TELNET), etc.) 400 for transmission. Before the data 400 are sent, the sending and receiving applications agree on a format and encoding and agree to exchange data (Recall, e.g., the peer-to-peer communications depicted with dashed lines in FIG. 1.). If necessary, the data are converted (character code, compression, encryption, etc.) to a form expected by the destination device.") column 5 lines 4-15).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate communication using the TCP/IP protocol stack as taught by Baum et al. with a method comprising receiving data from

an application as taught by Farrar et al. for the purpose of communications between applications over a network.

Regarding claim 18, Farrar et al. discloses a method, comprising: establishing a protocol to receive data indicative of a message to be sent to a destination address (column 24 lines 46-57); receiving data from an application, said data being compliant with said protocol and indicative of a first message, a first destination address, and a first outgoing message type (column 4 lines 36-44); converting said first message to an outgoing message in a format compatible with said first outgoing message type (column 6 lines 2-8); and sending said outgoing message to said first destination address ((“To send a message, the communications software sends the appropriate standard message parameter commands to the DCE in order to set up the transmission according to the values in the Priority and Ack Level header fields, and the provided Destination Address Type and Physical Value parameters.”) column 10 lines 36-41). However, Farrar et al. fails to teach a method wherein said protocol includes parameters for outgoing message type and destination address or sending said outgoing message to said first destination address. Baum et al. discloses a protocol that defines the data portion of a datagram and includes a destination address field. This reads on the claimed “... wherein said protocol includes parameters for destination address and outgoing message type; ...” ((“The 8-bit protocol field 618 defines the higher-level protocol to which the data portion of the datagram 420 belongs. The 16-bit header checksum field 620 permits the integrity of the IP header 412 to be checked. The 32-bit source address field 322 contains the IP address of the sender of the IP

datagram 420 and the 32-bit destination address field contains the IP address of the host to which the IP datagram 120 is being sent.”) column 4 lines 35-42).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate a protocol that defines the data portion of a datagram and includes a destination address field as taught by Baum et al. with a method comprising: establishing a protocol to receive data indicative of a message to be sent to a destination address; receiving data from an application, said data being compliant with said protocol and indicative of a first message, a first destination address, and a first outgoing message type; converting said first message to an outgoing message in a format compatible with said first outgoing message type; and sending said outgoing message to said first destination address as taught by Farrar et al. for the purpose of Internet Control Message Protocol.

Consider claim 22, and as applied to claim 18 above. Farrar et al., as modified by Baum et al., shows and discloses a method wherein a protocol includes at least one parameter for providing data to an application indicative of an error in delivery of an outgoing message to a destination address (“Likewise, if the LES is unable to deliver the message, a Negative Delivery Notification (NDN) is provided to the DCE.”) column 11 lines 8-10).

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Farrar et al. (US 6122671 A) in view of Oz et al. (US 7058087 B1).

Regarding claim 14, and as applied to claim 1 above, Farrar et al. discloses a method comprising: receiving data from an application, said data being indicative of a message, a destination address, and an outgoing message type; converting said message to an outgoing message in a format compatible with said outgoing message type; and sending said outgoing message to said destination address. However, Farrar et al. fails to teach receiving data at different times. Oz et al. discloses multiplexing basic media data units to provide a multiplexed sequence ("Basic media data units and modified basic media data units of the first sequence are transmitted during T.sub.1 T.sub.M. Basic media data units and modified basic media data units of the second sequence are transmitted during T.sub.1 T.sub.p. Basic media data units and modified basic media data units of the third sequence are transmitted during T.sub.2 T.sub.L+1. Basic media data units and modified basic media data units of the fourth sequence are transmitted during T.sub.1 T.sub.N.") column 16 lines 12-20).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate multiplexing basic media data units to provide a multiplexed sequence as taught by Oz et al. with a method comprising: receiving data from an application, said data being indicative of a message, a destination address, and an outgoing message type; converting said message to an outgoing message in a format compatible with said outgoing message type; and sending said outgoing message to said destination address as taught by Farrar et al. for the purpose of on-demand data acquisition.

Conclusion

Any response to this Office Action should be faxed to (571) 273-8300 or mailed to:

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Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Mark Fearer whose telephone number is (571) 270-1770. The Examiner can normally be reached on Monday-Thursday from 7:30am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, David Wiley can be reached on (571) 272-3923. The fax phone number for


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the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 571-272-4100.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Mark Fearer
M.D.F./mdf
June 6, 2007



DAVID WILEY
SUPERVISORY PATENT EXAMINER
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